

In the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application. Changes to the claims are shown with additions underlined and deletions in ~~strickethrough~~. No new matter has been added by this amendment to the claims.

1-4. (Canceled)

5. (Previously Presented) A method, comprising:

dispensing a first plurality of droplets, the first plurality of droplets having a flight path;
modifying a direction of the first plurality of droplets along their flight path using a first optical field;

disposing the first plurality of droplets on a medical device after modifying the direction of the first plurality of droplets;

dispensing a second plurality of droplets, the second plurality of droplets having a flight path, a droplet from the second plurality of droplets having a size different from a size of a droplet from the first plurality of droplets,

modifying the direction of the second plurality of droplets along their flight path using a second optical field; and

disposing the second plurality of droplets on the medical device after modifying the direction of the second plurality of droplets such that the first plurality of droplets and the second plurality of droplets form interleaving zones in a plurality of coatings on the medical device.

6-26. (Canceled)

27. (Previously Presented) A method, comprising:

dispensing a droplet, the droplet having a flight path;

modifying at least one of a direction, a velocity or an acceleration of the droplet along its flight path using an optical field, the modifying being based on a characteristic indicating that the droplet is unacceptable for disposing on a surface of a medical device; and

disposing, after the modifying, the droplet on a waste surface different from and proximate to the surface of the medical device.

28. (Previously Presented) The method of claim 27, wherein the characteristic includes at least one of a size, a weight, the velocity, the direction, the acceleration, or a chemical composition of the droplet.

29. (Previously Presented) The method of claim 27, wherein the modifying includes modifying the velocity of the droplet to substantially zero temporarily at a position along the flight path.

30. (Previously Presented) The method of claim 27, wherein:
the droplet is included within a plurality of droplets;
the dispensing includes dispensing the plurality of droplets;
the modifying includes modifying the direction of at least two droplets from the plurality of droplets on a per-droplet basis using the optical field; and
the disposing includes disposing the plurality of droplets on the waste surface after the modifying.

31. (Previously Presented) The method of claim 27, wherein:
the droplet is included within a plurality of droplets;
the dispensing includes dispensing the plurality of droplets, the dispensing of the plurality of droplets defines a first plume profile;
the modifying includes modifying the direction of the plurality of droplets based on a characteristic of the plurality of droplets indicating that the plurality of droplets is unacceptable for disposing on the surface of the medical device, the modifying defines a second plume profile different from the first plume profile, the characteristic of the plurality of droplets including at least one of a size, a weight, the velocity, the direction, the acceleration, or a chemical composition of the plurality of droplets; and

the disposing includes disposing the plurality of droplets having the second plume profile on the waste surface after the modifying.

32. (Previously Presented) The method of claim 27, wherein:

the optical field is a first optical field, the droplet is included within a first plurality of droplets,

the dispensing includes dispensing the first plurality of droplets,

the modifying includes modifying the direction of the first plurality of droplets using the first optical field based on a characteristic of the first plurality of droplets indicating that the first plurality of droplet is unacceptable for disposing on the surface of the medical device, the characteristic of the first plurality of droplets including at least one of a size, a weight, a velocity, the direction, an acceleration, or a chemical composition of the first plurality of droplets, the disposing includes disposing the first plurality of droplets on the waste surface after the modifying the direction of the first plurality of droplets,

the method further comprising:

dispensing a second plurality of droplets, a droplet from the second plurality of droplets having a size different from the size of the droplet from the first plurality of droplets; and

modifying the direction of the second plurality of droplets using a second optical field.

33. (Previously Presented) The method of claim 27, wherein the droplet is a first droplet, the method further comprising:

dispensing a second droplet at a time period at least a portion of which overlaps with a time period in which the first droplet is dispensed, the second droplet having a flight path;

modifying at least one of a direction, a velocity, or an acceleration of the second droplet along its flight path using the optical field based on a characteristic of the second droplet indicating that the droplet is unacceptable for disposing on the surface of the medical device, the characteristic of the second droplet including at least one of a size, a weight, the velocity, the direction, the acceleration, or a chemical composition of the second droplet; and

disposing the second droplet on the waste surface after the modifying of the second droplet.

34. (Canceled)

35. (New) The method of claim 5, wherein the dispensing associated with the first plurality of droplets includes dispensing toward the medical device along the flight path of the first plurality of droplets, the dispensing associated with the second plurality of droplets includes dispensing toward the medical device along the flight path of the second plurality of droplets.

36. (New) A method, comprising:

dispensing a droplet toward a medical device along a first flight path; and
modifying at least one of a direction, a velocity, or an acceleration of the droplet using an optical field such that the droplet moves along a second flight path outside of the optical field until the droplet is disposed on a surface of the medical device, the second flight path being different than the first flight path.

37. (New) The method of claim 36, wherein:

the modifying includes modifying the velocity of the droplet to substantially zero temporarily.

38. (New) The method of claim 36, wherein:

the droplet is from a plurality of droplets;
the dispensing includes dispensing the plurality of droplets, the dispensing of the plurality of droplets defines a first plume profile;
the modifying includes modifying the direction of the plurality of droplets using the optical field, the modifying defines a second plume profile different from the first plume profile;
and
the plurality of droplets having the second plume profile is disposed on the medical device after the modifying.

39. (New) The method of claim 36, wherein the modifying is based on a measured characteristic of the droplet, the measured characteristic of the droplet is at least one of a size, a weight, a velocity or a chemical composition of the droplet.
40. (New) The method of claim 36, further comprising:
measuring at least one of the direction, the velocity, or the acceleration of the droplet at a position along the first flight path, the second flight path being defined at least in part based on the measuring.
41. (New) The method of claim 36, wherein a composition of the droplet on the surface of the medical device differs from the composition of the droplet after the dispensing.
42. (New) The method of claim 36, wherein the droplet is a first droplet,
the method further comprising:
dispensing a second droplet toward the medical device; and
modifying at least one of a direction, a velocity, or an acceleration of the second droplet using the optical field such that the second droplet is disposed on a waste surface different from and proximate to the surface of the medical device.
43. (New) The method of claim 36, wherein a temperature of the droplet decreases after being dispensed.
44. (New) A medical device prepared by a plurality of coatings formed by the process comprising the steps of:
dispensing a first plurality of droplets, the first plurality of droplets having a flight path;
modifying a direction of the first plurality of droplets along their flight path using a first optical field;
disposing the first plurality of droplets on the medical device after modifying the direction of the first plurality of droplets;

dispensing a second plurality of droplets, the second plurality of droplets having a flight path, a droplet from the second plurality of droplets having a size different from a size of a droplet from the first plurality of droplets,

modifying the direction of the second plurality of droplets along their flight path using a second optical field; and

disposing the second plurality of droplets on the medical device after modifying the direction of the second plurality of droplets such that the first plurality of droplets and the second plurality of droplets form interleaving zones in the plurality of coatings on the medical device.

45. (New) The medical device of claim 44, wherein the dispensing associated with the first plurality of droplets includes dispensing toward the medical device along the flight path of the first plurality of droplets, the dispensing associated with the second plurality of droplets includes dispensing toward the medical device along the flight path of the second plurality of droplets.

46. (New) A medical device having a droplet disposed by a process comprising the steps of:
dispensing the droplet toward the medical device along a first flight path; and
modifying at least one of a direction, a velocity, or an acceleration of the droplet using an optical field such that the droplet moves along a second flight path outside of the optical field until the droplet is disposed on a surface of the medical device, the second flight path being different than the first flight path.